REMARKS

Applicants provide the following remarks to indicate that the claimed invention distinguishes over the cited art. Reconsideration and allowance of the application are respectfully requested.

Rejections Under 35 U.S.C. 102

The Office Action rejects claims 1-18 as being anticipated by U.S. Patent No. 5,023,754 of Aug.

Independent claim 1 recites a network device that includes a first functional printed circuit board located in a first portion of the network device, and a second functional printed circuit board located in a second portion of the network device, wherein the second functional printed circuit board is reverse orientated within the network device with respect to the first functional printed circuit board. The device further includes a first *mid-plane* connected electrically to the first functional printed circuit board for routing electrical signals generated by that board. It also includes a second *mid-plane* electrically connected to the second functional printed circuit board for routing electrical signals generated by said second board. A switch fabric card that is connected to both the first and the second mid-planes provides electrical connectivity therebetween.

Aug discloses a double-sided motherboard for use in a computer system, which allows connecting logic elements to both its front and back sides for more efficient packing of these elements within the system's enclosure. The double-sided motherboard includes logic connectors on each side to which the logic elements can be connected. Two stiffeners (elements 30 and 44 in FIGURE 2 of Aug) mechanically support the front and the back sides of the mother board.

The Examiner identifies the stiffeners (30) and (44) of Aug as corresponding to the mid-planes recited in claim 1. Applicants respectfully disagree with this characterization of the stiffeners for the following reasons. The stiffeners 30 and 44 are simply mechanical elements, and not electrical components that would be able to route electrical signals generated by the logic elements. The Examiner incorrectly states that the mid-planes (30) and (44) of Aug

include connectors 28. These connectors are, however, provided "on the front side 24 and on the backside (26) (not shown) of the backplane card 22," and *not* on the stiffeners (30) and (44). *See* Aug, col. 2, lines 63-66. In other words, the stiffeners do *not* include any connectors or any other electrical components for routing signals generated by the logic elements.

Moreover, claim 1 further recites a switch fabric card connected to both the first and second mid-planes to provide electrical connectivity therebetween – a feature not taught by Aug. The Examiner states that the double-sided motherboard provides "electrical connection of the circuit board (56) on both sides when they are inserted and connected to the connectors (28) of the two midplanes." *See* Office Action, page 4. However, as noted above, the stiffeners (30) and (44) of Aug, which the Examiner characterizes as mideplanes, are simply mechanical components and do not include the connectors (28) (the connectors are provided the backplane). In other words, the double sided motherboard does not provide electrical connectivity between the stiffeners, but rather communicates with logic elements disposed on its opposed sides.

CONCLUSION

In view of the above remarks, Applicants request allowance of the application. The Examiner is invited to call the undersigned at (617) 439-2514 if there are any remaining questions.

Dated: Feb. 22, 2005

Respectfully submitted,

By _____

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